NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 dexandria, va zww.uspio.go

NOTICE OF ALLOWANCE AND FEE(S) DUE

55649 7590 07/26/2010 MOSER IP LAW GROUP / APPLIED MATERIALS, INC.

EXAMINER ANGADI, MAKI A PAPER NUMBER ARTHNIT

1713 DATE MAILED: 07/26/2010

1030 BROAD STREET SUITE 203 SHREWSBURY NI 07702

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,364	04/12/2004	Steven C. Shannon	8756/ETCH/DICP	4844

TITLE OF INVENTION: PLASMA CONTROL USING DUAL CATHODE FREQUENCY MIXING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/26/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of a) specifying a new corre	maintenance fees wi spondence address;	II be	mailed to the current (b) indicating a sepa	correspondence add rate "FEE ADDRE	fress as
	ENCE ADDRESS (Note: Use Bi	ock 1 for any change of address)	Not Fee pap bay	e: A certificate of n (s) Transmittal. This ers. Each additional e its own certificate	nailing certif paper of mai	can only be used for icate cannot be used for such as an assignment ling or transmission.	r domestic mailings or any other accomp nt or formal drawin	of the xanying g, must
1030 BROAD S SUITE 203	TREET	^{/2010} PLIED MATERIA	LS. INC. 1 be	Certify that this	ificate	of Mailing or Trans Transmittal is being ficient postage for first ISSUE FEE address 273-2885, on the d	mission	United
SHREWSBURY	7, NJ 07702						(Depositor	(s name)
							(Si	ignature)
			L					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	:	ATTO	RNEY DOCKET NO.	CONFIRMATION	NO.
10/823,364	04/12/2004		Steven C. Shannon		87	56/ETCH/DICP	4844	
			DE FREQUENCY MIXIN				1	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0 1		\$1810	10/26/2010)
EXAM		ART UNIT	CLASS-SUBCLASS	J				
ANGADI,		1713	438-706000					
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.83). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) and Lanched. Tree Address' indication (or "Fee Address" Indication form PTO/SB/47 Rev 03-02 or more recent) attached. Use of a Customer Number is required.			or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent attor listed, no name will be	the names of up to 3 registered patent attorneys gents OR, alternatively, the name of a single firm (having as a member a gents of a store agent) and the names of up to gistered attorney or agents. If no name is d, no name will be printed,				
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE		THE PATENT (print or ty data will appear on the part of the part o	atent. If an assigne assignment. If and STATE OR CO	DUNT			
4a. The following fee(s) Issue Fee Publication Fee (N	vo small entity discount p		b. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca The Director is hereb overpayment, to Depo	rd. Form PTO-2038	is atta	ched.		ny form).
	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no lor					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than Office.	the applicant; a regis	tered a	ittorney or agent; or th	e assignee or other p	party in
Authorized Signature				Date				
Typed or printed nam	e		Registration No.					
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatis U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by th timated to take 12 m vidual case. Any cor er, U.S. Patent and T O THIS ADDRESS.	e publ inutes nment 'raden SENI	ic which is to file (and to complete, includir s on the amount of tin ark Office, U.S. Dep O TO: Commissioner	by the USPTO to p g gathering, prepari ne you require to co artment of Commerc for Patents, P.O. Bo	rocess) ng, and omplete e, P.O. x 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

-	I DOS SO LOS ON LAS	DE RIG DAME	TOTAL MATERIAL PROPERTY OF THE	A MONOCONTRACTOR OF CONTRACTOR NAME OF CONTRACTOR N	CONTRACTOR CONTRACTOR
	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/823,364	04/12/2004	Steven C. Shannon	8756/ETCH/DICP	4844
	55649 75	90 07/26/2010		EXAM	INER
	MOSER IP LAW	GROUP / APPLIE	ANGADI, MAKI A		
1030 BROAD STREET			ART UNIT PAPER NUMI		
SUITE 203 SHREWSBURY, NJ 07702				1713	
SHKEWSDUK 1, NJ 07/02			DATE MAIL ED: 07/26/2010		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1067 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1067 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/823 364 SHANNON ET AL. Notice of Allowability Examiner Art Unit MAKIA ANGADI 1713 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 6/23/2010. The allowed claim(s) is/are 1-14,33-42, 44 and 46-48. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

3. Mail Date 5/20/2005, 6/5/2006	7. LI Examiner's Amendment/Comment			
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. X Examiner's Statement of Reasons for Allowance			
or Biological Material	9. Other			
/Maki A Angadi/	/Lan Vinh/			
Examiner, Art Unit 1713	Primary Examiner, AU 1713			
U.S. Patent and Trademark Office				

5. Notice of Informal Patent Application

Interview Summary (PTO-413), Paper No./Mail Date _____.

Attachment(s)

1. | Notice of References Cited (PTO-892)

Notice of Draftperson's Patent Drawing Review (PTO-948)

Application/Control Number: 10/823,364 Page 2

Art Unit: 1713

Allowable Subject Matter

Claims 1-14, 33-42, 44 are 46-48 are allowed.

The following is an examiner's statement of reasons for allowance: In view of the recent decision by the Board of Patent Appeals and Interferences dated

April 20, 2010.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAKI A. ANGADI whose telephone number is

(571)272-8213. The examiner can normally be reached on 8 AM to 4.30 PM.

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

Application/Control Number: 10/823,364 Page 3

Art Unit: 1713

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lan Vinh/ Primary Examiner, Art Unit 1713 /Maki A Angadi/ Examiner, Art Unit 1713